

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A liquid crystal display device, comprising:
a liquid crystal display (LCD) panel, the LCD panel including a plurality of gate lines and a plurality of data lines crossing the plurality of gate lines, and a plurality of red (R), green (G), and blue (B) pixels arranged in a matrix pattern;
a gate driving unit ~~for applying to~~ apply scan signals to the plurality of gate lines;
a lookup table ~~for storing to~~ store a gray scale value corresponding to a predetermined gray scale level of a displayable color;
a data processing unit to retrieve a gray scale value from the lookup table and for compensating to compensate image information according to the retrieved ~~stored~~ gray scale value; and
a data driving unit ~~for receiving to~~ receive the compensated image information and ~~for applying to~~ apply the compensated image information to the data lines.
2. (Original) The device of claim 1, wherein the predetermined gray scale level corresponds to a gray scale level of the displayable color prior to a reduction in a reproducibility of the displayable color.
3. (Currently Amended) The device of claim 1, wherein the stored gray scale value is a [[the]] maximum gray scale value,
wherein the maximum gray scale value is the gray scale value corresponding to the maximum gray scale level displayable by the LCD panel for which the color reproducibility of the displayable color is not reduced.
4. (Original) The device of claim 1, wherein the displayable color includes at least one of a red, green, and blue color.

5. (Original) The device of claim 1, wherein the displayable color is displayable at a plurality of gray scale levels.

6. (Original) The device of claim 1, wherein the lookup table stores gray scale values of a blue color.

7. (Currently Amended) The device of claim 6, wherein the lookup table stores gray scale values each corresponding to one of 64[[-bit]] gray scale levels of the blue color.

8. (Currently Amended) The device of claim 7, wherein the maximum gray scale value corresponds to a 51st [[bit]] gray scale level of the blue color.

9. (Currently Amended) The device of claim 8, wherein stored gray scale values corresponding to a 52nd [[bit]] gray scale level to a 64th [[bit]] gray scale level are identical to a gray scale value [[of]] corresponding to the 51st [[bit]] gray scale level.

10. (Original) The device of claim 1, wherein the lookup table stores gray scale values of blue, red, and green colors.

11. (Currently Amended) The device of claim 10, wherein gray scale values of the 52nd [[bit]] gray scale level to the 64th [[bit]] gray scale level are storable in the lookup table upon mixing gray scale values of at least two of R, G, and B colors.

12. (Currently Amended) A method for improving a color reproducibility of a liquid crystal display (LCD) device, comprising:

increasing a gray scale value of at least one of a red (R), green (G), and blue (B) color;

detecting a gray scale value at which a color reproducibility of the LCD device is reduced;

storing a correspondence of the detected gray scale value ~~corresponding to~~ and a predetermined gray scale level of a displayable color;

compensating a received image information, the received image information including the detected gray scale value; and

applying the compensated image information to data lines of the LCD device, the compensated image information including the maximum gray scale value,

wherein the maximum gray scale value is the gray scale value corresponding to the maximum gray scale level displayable by the LCD panel for which the color reproducibility of the displayable color is not reduced, and

wherein detecting includes measuring the gray scale level of a color displayed by the LCD panel.

13. (Original) The method of claim 12, wherein the predetermined gray scale level corresponds to a gray scale level of the displayable color prior to a reduction in a reproducibility of the displayable color.

14. (Original) The method of claim 12, wherein the stored gray scale value is the maximum gray scale value.

15. (Canceled)

16. (Original) The method of claim 15, wherein the displayable color includes at least one of a red, green, and blue color.

17. (Currently Amended) The method of claim 12, wherein the maximum gray scale value corresponds to a 51st [[bit]] gray scale level of the blue color.

18. (Currently Amended) The method of claim 17, wherein the gray scale value at which the color reproducibility is reduced corresponds to a 52nd one of 64 ~~bits~~ of gray scale levels of blue color displayable by the LCD device.

19. (Currently Amended) A method of driving a display device, comprising:

receiving image information, the image information including a gray scale value corresponding to a color displayable by the display device;

determining whether the gray scale value is greater than a predetermined corresponding gray scale level at which the color is displayable by the display ~~panel~~ device;

applying the image information to the ~~LCD~~ display device if it is determined the gray scale value is not greater than the predetermined corresponding gray scale level; and

compensating the image information if it is determined the gray scale value is greater than the predetermined corresponding gray scale level.

20. (Currently Amended) The method of claim 19, further comprising applying the compensated image information to ~~[[the]]~~ a plurality of data lines of the display device.

21. (Original) The method of claim 19, wherein the color is at least one of a red, green, and blue color.

22. (Original) The method of claim 19, wherein the predetermined corresponding gray scale level corresponds to a gray scale level of the color displayable by the display device, wherein the color is displayable at a reduced color reproducibility.

23. (Original) The method of claim 19, wherein the compensating includes mixing gray scale values of at least two of red, green, and blue colors.